

ABSTRACT OF THE DISCLOSURE

A semiconductor memory device includes an element region and an element-isolating region provided on a semiconductor substrate, a capacitor formed in a trench, a first insulating film formed on a side surface of the trench on the capacitor, a first conductive layer provided on the first insulating film and the capacitor so as to bury the trench, a second insulating film provided on a side surface of the trench and on the first insulating film and on both side surfaces of the element region, a gate electrode provided on the element region through a gate insulating film, a source region and a drain region provided in the element region, and a contact layer provided on the first conductive layer and the element region to connect the first conductive layer with the source region or the drain region.